

## CLAIMS

We Claim:

1. A method of locating a mobile station comprising the steps of:  
providing a phone number of the mobile station to a service node;  
5 initiating a call to the mobile station from a service node;  
obtaining cell and sector information of the mobile station during processing of  
the call;

identifying the call as a request to locate the mobile; and  
providing the cell and sector information to the service node.

10 2. The method of claim 1 wherein the step of providing a phone number of  
the mobile station comprises the steps of:

playing a message from the service node requesting the phone number of the  
mobile station; and  
receiving DTMF tones corresponding to the mobile station's phone number; and  
15 translating the DTMF tones into dialed digits.

3. The method of claim 1 wherein the step of providing a phone number of  
the mobile station is performed by a web-based interface.

4. The method of claim 1 wherein the step of providing a phone number of  
the mobile station comprises the steps of:

20 transmitting a web form having a mobile phone number field to a web-based  
interface; and  
receiving the phone number of the mobile station via a submission from the web-  
based interface.

25 5. The method of claim 1 wherein the step of providing a phone number of  
the mobile station comprises the steps of:

obtaining user account information;  
transmitting a web form having a service request object;  
receiving an indication that the service request object was selected;

querying a database for the mobile phone number field corresponding to the user account information; and  
receiving the phone number of the mobile station in response to the query.

5 6. The method of claim 1 wherein the step of obtaining cell and sector information comprises the steps of:  
paging a mobile station;  
receiving a response from the mobile, where the response indicates the cell and sector where the mobile station is located; and  
10 sending a facilities available message containing cell and sector information to a service control point.

7. The method of claim 6 wherein the step of providing the cell and sector information comprises sending the cell and sector information from the service control point to the service node.

15 8. The method of claim 6 further comprising the step of provisioning a Terminating Resources Available trigger, and wherein said step of sending a facilities available message is responsive to said trigger.

9. The method of claim 8 further comprising the step of un-provisioning the Terminating Resources Available trigger.

20 10. The method of claim 1 further comprising the steps of:  
querying a database for a message corresponding to the cell and sector information; and  
playing the message to a user.

11. The method of claim 10 wherein the message includes city and state information.

25 12. The method of claim 1 further comprising the steps of:  
querying a database for a graphic image corresponding to the cell and sector information; and

transmitting the graphic image to a user.

13. The method of claim 1 further comprising the step of authenticating a user.

5 14. The method of claim 1 where the phone number is a MIN.

15. The method of claim 1 where the phone number is of the form NPA-NXX-XXXX.

10 16. A method of locating a mobile station comprising the steps of:  
providing a phone number of the mobile station to a network node;  
initiating a call to the mobile station from a service node;  
obtaining cell and sector information of the mobile station during processing of  
the call;  
15 identifying the call as a request to locate the mobile; and  
providing the cell and sector information to a user.

17. The method of claim 16 wherein the network node is an intelligent peripheral node.

20 18. The method of claim 16 wherein the network node is a service control point node.

19. The method of claim 16 further comprising the step of authenticating a user.

25 20. The method of claim 16 wherein the step of obtaining cell and sector information comprises the steps of:  
paging a mobile station;  
receiving a response from the mobile, where the response indicates the cell and sector where the mobile station is located; and

sending a facilities available message containing cell and sector information to a service control point.